

WHAT IS CLAIMED IS:

1. An electronic component comprising a circuit board assembly having a thin polymer sheet having no electronic function located within said assembly, said circuit board assembly and said thin polymer sheet encapsulated in a potting material.

2. The electronic component of claim 1 wherein said polymer sheet comprises polytetrafluoroethylene.

3. The electronic component of claim 2 wherein said polymer sheet has a thickness of from about .015 to .030 in.

4. The electronic component of claim 1 wherein said circuit board assembly comprises two signal conditioning boards arranged substantially perpendicularly to a main circuit board, and wherein portions of said thin polymer sheet are located between said pair of conditioning boards, and other portions of said thin polymer sheet are located between said main board and said pair of conditioning boards.

5. The electronic component of claim 1 wherein said thin polymer sheet is folded over itself to form back-to-back face portions and further wherein free end portions of said thin polymer sheets are folded so as to extend away from said face portions.

6. The electronic component of claim 5 wherein said thin polymer sheet is formed with apertures in said end portions that are adapted to permit board connectors to pass therethrough.

7. An electronic component comprising a circuit board grouping including a connector board secured to one side of a main board and a pair of signal conditioning boards engaged with an opposite side of said main board, said pair of signal conditioning boards substantially parallel to each other and substantially perpendicular to said main board; and a thin sheet of polymer material folded to provide back-to-back face portions and a pair of free end portions extending generally away from said face portions, wherein said thin sheet is inserted into the component such that said back-to-back face portions are located between said pair of signal conditioning boards and said pair of free end portions extend in substantially opposite directions away from said face portions, between said main board and said signal conditioning boards.

8. The circuit board grouping of claim 7 wherein said thin sheet is formed with a pair of apertures in said free end portions for permitting connectors on said signal conditioning boards to be arranged with connectors 30, 32 on said main board.

9. The circuit board grouping of claim 7 wherein said thin polymer sheet comprises polytetrafluoroethylene.

10. The circuit board grouping of claim 7 wherein said thin polymer sheet has a thickness of from about .015 to about .030 in.

11. The circuit board grouping of claim 9 wherein said thin polymer sheet has a thickness of from about .015 in. to about .030 in.

12. The circuit board grouping of claim 11 wherein said thin polymer sheet has a thickness of .015 in.

13. The circuit board grouping of claim 7 wherein said circuit board grouping comprises a transducer interface module.

14. A method of preventing damage to circuit boards in an electronic component encapsulated in potting material due to cracks in the potting material comprising:

a) providing plural circuit boards for assembly into the component;

b) during assembly, inserting a thin polymer film at least between adjacent ones of said plural circuit boards, said polymer film having no electronic function;

c) completing the assembly of the component; and

d) encapsulating the component in a potting material.

15. The method of claim 14 wherein said plural circuit boards comprise a connector board secured to one side of a main board and a pair of signal conditioning boards plugged into an opposite side of said main board, said pair of signal conditioning boards substantially

parallel to each other and substantially perpendicular to said main board, and wherein during step b), the thin polymer film is inserted between said pair of signal conditioning boards.

16. The method of claim 15 wherein said thin sheet is formed with a pair of apertures for permitting said signal conditioning boards to be plugged into said main board.

17. The method of claim 15 wherein said thin polymer sheet comprises polytetrafluoroethylene.

18. The method of claim 15 wherein said thin polymer sheet has a thickness of from about .015 to about .030 in.

19. The method of claim 15 wherein prior to step b), said thin polymer film is folded over itself to form back-to-back face portions, and free end portions are folded so as to extend away from said face portions.

20. The method of claim 19 wherein, during step b), said face portions are inserted between said signal conditioning boards and said free end portions are arranged to extend generally parallel to said main board and generally perpendicular to said face portions.